Middle Kansas/Pottawatomie County

Flood Risk Review Meeting

October 24, 2018

City Hall ◆ 200 South 7th Street, Saint Marys, KS

KDA - Division of Water Resources Topeka Field Office

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Draft Data available for download: http://bit.ly/MiddleKS_FRR

*If you have any problems with retrieving the data, please contact Joanna Rohlf

Important Upcoming Dates

This FRR is for the Middle Kansas watershed. The projected dates for Preliminary Distribution and beyond are for the Pottawatomie County portion of the project, including work performed in Phase I and Phase II.

1. Deadline to submit FRR Meeting comments	November 30, 2018
2. Estimated Public Open House	January 2019
3. Estimated Preliminary Distribution of DFIRM	April 2019
4. Estimated Community Coordinator's Officer Meeting	May 2019
5. Appeals Period * Dates depend on publication in Federal Register.	October – December 2019
6. Letter of Final Determination * No changes to the map are made after this time. This date is exactly six months prior to effective date of new maps.	March 2020
7. Effective Date of New Maps	September 2020

Please note that all dates are subject to change, particularly after preliminary distribution as there are occurrences out of KDA or Wood's control that can affect schedule, such as publishing in the Federal Register. The number of comments and appeals can also affect schedule, which is part of the reason why we believe it is important to discuss potential issues or questions early on in the process. We appreciate your participation at this time and look forward to working with you throughout the continuation of this process.

Process to create the maps

In 2016, the Middle Kansas Watershed was selected for a watershed RiskMAP project as a result of needs identified from communication with local officials and from the 2015 Discovery Project for the watershed. The first phase of the Middle Kansas project produced new floodplain data for the portions of Wabaunsee County and the City of Wamego within the watershed. New detailed Zone AE studies were performed for three streams in and near the City of Wamego. A new limited detailed Zone AE study was performed for the portion of Mill Creek near the City of Paxico. The remaining streams in the study were mapped using Zone A analysis. The topography used to create the maps is the 2012 countywide LiDAR.

In Phase II of the project, new floodplain data was produced for the Kansas River through Pottawatomie County, and for those areas on map panels not replaced in the 2012 Pottawatomie County FIRM update. New detailed Zone AE studies were performed for the Kansas River and for College Creek and Willard Creek in and near the City of St. Marys. The remaining streams in the study were mapped using Zone A analysis. Unaccredited levee systems in both St. Marys and Belvue were mapped without being considered (Natural Valley) unless they can be accredited by legitimate sponsor organizations within the project timeframe.

For the Kansas River, hydrologic and hydraulic analyses were developed for the 10, 4, 2, 1, 1+ and 0.2-percent-annual-chance flood events. Hydrology was developed from a gage analysis performed. A hydraulic HEC-RAS 1D model was created using LiDAR topography to determine cross-section geometry. Bridges, culverts, weirs, and other structures were surveyed in the field and included in the hydraulic model. A floodway was developed for the Kansas River

The hydrology for the College Creek and Willard Creek watersheds were developed from rainfall-runoff models, which were applied to the Zone AE and Zone A portions of the watersheds. Bridges, culverts, weirs, and other structures were surveyed in the field and included in the rainfall-runoff models and the Zone AE portions of the hydraulic models. For College Creek, a hydraulic HEC-RAS 2D model was created using LiDAR topography. 2D modeling is the preferred method for flat-terrain areas where the flood water can flow multiple directions; that is the primary reason that it was chosen for this area. For Willard Creek, a hydraulic HEC-RAS 1D model was created using LiDAR topography to determine cross-section geometry. A floodway was developed for Willard Creek. The hydrologic and hydraulic analyses for these streams were developed for the 10, 4, 2, 1, 1+ and 0.2-percent-annual-chance flood events.

For the remaining Zone A streams, hydrology was developed for the 10, 4, 2, 1, 1+ and 0.2-percent-annual-chance flood events. Hydrology was developed from USGS regression equations. Hydraulic HEC-RAS 1D models were created using LiDAR topography to determine cross section geometry.

Data on FTP site:

- > Draft DFIRM
 - Shapefiles of the draft DFIRM data
- > Meeting documents
 - o Power Point & Handouts (plus Sign-In sheets when available)
- > Pottawatomie_FRR.mxd
 - o MXD with data on the FTP site loaded and symbolized. It does not contain topography or imagery, but they can be easily added to the MXD.

DRAFT DFIRM Web Map

KDA has created and is hosting a web map to view the Pottawatomie County Draft DFIRM data. Comments may be directly submitted through the web map using a comment tool. Use the tool to draw a box around the area in question and fill out the associated text boxes with the pertinent comment information. Comments can also be submitted via email using the contact information provided on the reverse side of this handout.

The web map can be accessed at the following web address: http://gis2.kda.ks.gov/gis/middle_ks